Kansas
Department of Health and Environment

2018 Hazardous Waste Generator Workshop

Basic Course

Disclaimer

This will not be a substitute for your training requirements.

Job specific training is required to meet the requirements under RCRA.

Topics For This Morning

Introduction to RCRA

Waste determinations

- What is a waste
- What defines a solid waste
- Exemptions
- Hazardous Waste Generator Classifications

On-site Management

- Containers
- Training
- Emergency Preparedness

Navigating KDHE Website

- Resources
- CAVs

Introduction To RCRA

RCRA – Resource Conservation and Recovery Act

- "Cradle to Grave" Law (Point of generation until final disposal)
  - All wastes must be evaluated and properly managed.
  - Responsibility falls to everyone handling, managing, and otherwise in possession.
  - Ignorance of the law is not an excuse.

Why?

To protect human health and the environment by ensuring responsible management of hazardous and nonhazardous waste.

Introduction To RCRA

1976 – Resource Conservation and Recovery Act (RCRA)

- Purpose was to create responsible disposal options and encourage recycling/reuse.

1980 – EPA implements regulations.

- Created a set of rules to ensure the proper handling and disposal of “solid waste.”

Introduction To RCRA

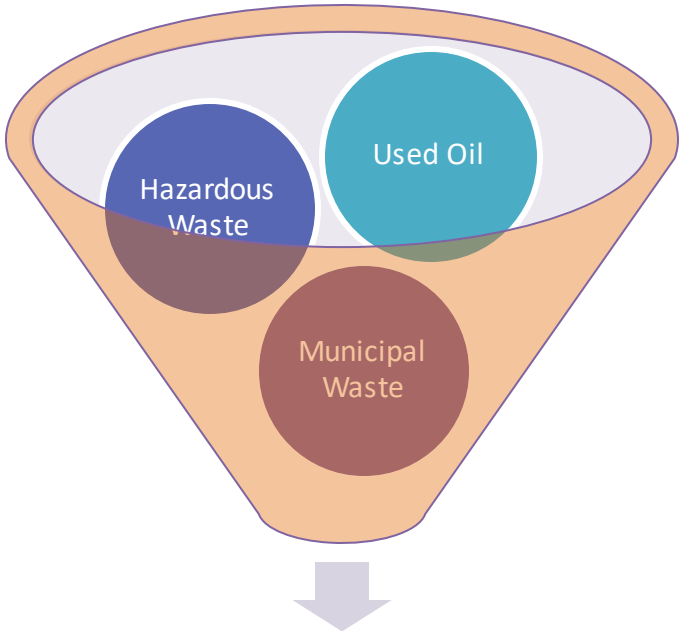
1982 – Kansas Hazardous Waste Program begins

April 29, 2011 – Major revisions to the Kansas Hazardous Waste Program.

2013 – Technical revisions and adoption of RCRA Corrective Action.

Additional adoptions and revisions are coming (will be discussed this afternoon).

How does RCRA work?



How does RCRA work?

What is a solid waste?

- Anything (solid, liquid, or gas) that has been discarded
  - Abandoned (disposed, burned, accumulated, or stored)
  - Recycled (recovered, regenerated, etc.)
  - Inherently waste-like

2018 Hazardous Waste Generator Workshop

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Kansas Department of Health and Environment

Announcements and News

- Medical Sharps Disposal NEW
- Medical Sharps Disposal for Livestock NEW
- Household Hazardous Waste Program Report - SFY17 NEW
- Kansas Coal Combustion Residuals Documents
- Kansas Solid Waste Program Report - SFY17 NEW

Compliance, Assistance, & Enforcement

- Accredited Environmental Laboratories
- Old City Dump Cleanup Program
- City/County Illegal Dump Cleanup Program
- File a Complaint
- Compliance Assistance Visits Program
- Solid & Hazardous Waste Compliance Documents

Composting

- Composting at Livestock Facilities Information Sheet
- Composting Forms

Hazardous Waste Generators & Transporters

- Biennial HW Report
- e-Manifest NEW
- EPA's RCRAInfo Database
- Hazardous Waste Compliance Calendars
- Hazardous Waste Fees
- Hazardous Waste & Used Oil Forms
- Hazardous Waste Generator Handbook
- Hazardous Waste Transporter List
- Used Oil Transporter List

Hazardous Waste Permitting & Corrective Action

- Hazardous Waste Fees
- HW Public Notices
- HW Fact Sheets
- HW Inflation for Gross Domestic Product
- PCB Information
- Permitting & Inspection Forms

Household Hazardous Waste

- FREE 24-Hour HHW Training
- HHW Facilities Listing
- HHW Permitting Forms
- HHW Training
- Kansas Medication Disposal Program

Kansas Medication Disposal Program

- Drop-off Location Map
- FAQs and Program Resources
- Medication Disposal Participant Survey
- Medication Disposal Reporting form
- Pharmacy Participation Application

Regulations, Policies, & Technical Guidance

- Policies
- Proposed Regulations
- Statutes and Regulations
- Technical Guidance Documents

Reports, Publications, & Newsletters

- 2016 State Solid Waste Management Plan
- BWM Newsletters

Solid Waste Program

- E-Waste Permit Application Forms
- Forms for Activities not Requiring a Permit

Mausoleum Permitting
Solid & Hazardous Waste Compliance Documents
Special Waste Disposal Request

Maps & Databases

EPA's RCRAInfo Database
Old City Dump Locations
Solid Waste Facilities Database and Map

Other Information

Accredited Environmental Laboratories
Debris Management Plan
Ebola Waste is "Hazardous" - Secretary's Policy
Hazardous Waste Compliance Calendars
Land-Spreading Oil and Gas Drilling Waste
Medical Sharps Disposal for Livestock
Medication Disposal Options
Landfill Gas Fact Sheet
Safe Disposal of Medical Sharps
Solid Waste Tonnage Reporting
Stormwater Rules at SW Facilities

Websites

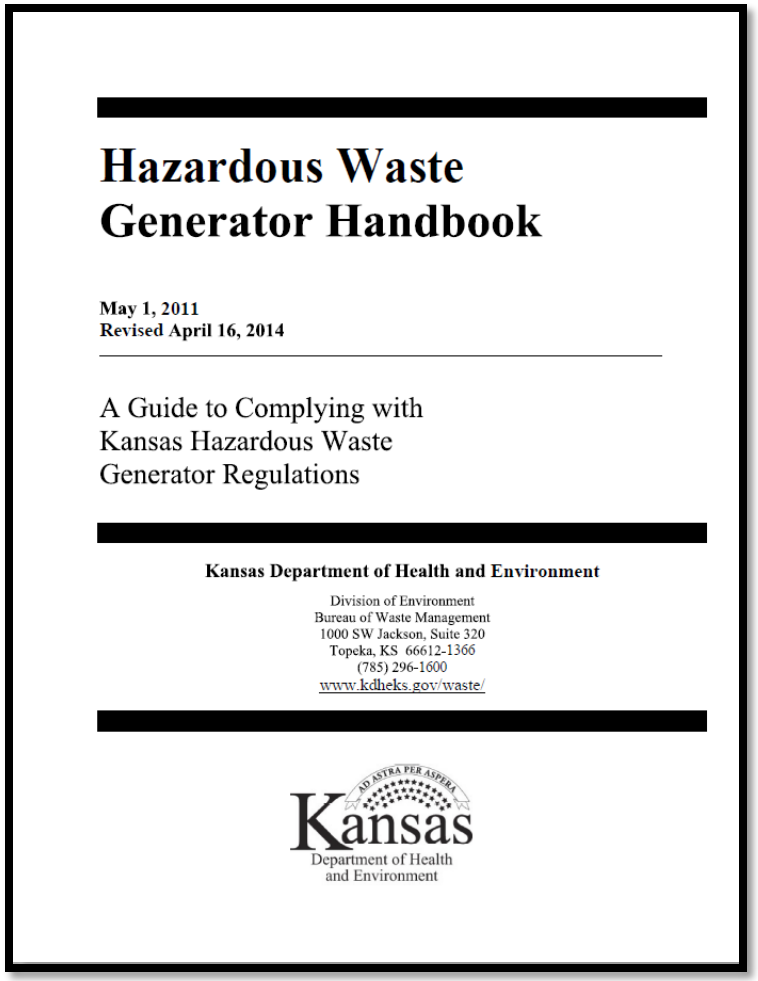
Get Caught Recycling
Kansas E-Waste
Kansas Recycles
Kansas Organization of Recyclers
Video Showcase

Our Mission: To protect and improve the health and environment of all Kansans.

Where to start?

Hazardous Waste Generator Handbook

- Available on our website
- Contains
  - Guide to complying with the regulations
  - Technical Guidance Documents
  - Example forms
  - Training Guide/Manual



Hazardous Waste Generator Handbook

May 1, 2011
Revised April 16, 2014

A Guide to Complying with Kansas Hazardous Waste Generator Regulations

Kansas Department of Health and Environment

Division of Environment
Bureau of Waste Management
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366
(785) 296-1600
www.kdheks.gov/waste/

Kansas Department of Health and Environment

Where to start?

Waste Determinations	• Identify waste streams • Is it a solid waste? • Exemptions	• Is it hazardous? • How much are you generating? • Generator Classification?
On-Site Management	• Notification • Container Management • Training	• Emergency Preparedness • Record Keeping
Disposal	• Disposal Options • Transportation • Manifests	• Land Disposal Restrictions (LDRs)

Waste Determinations

Required at the point of generation, prior to any dilution, mixing, or other alteration of the waste occurs, and any point thereafter where exposure or other factors may have changed the properties of the waste.

This includes any process changes that occur after a determination has been made.

Waste Determinations

Step 1: Identify your wastes

What are your waste streams?

What do you discard?

What gets recycled?

What off-spec products/by-products?

What is no longer of value to your process?

Waste Determinations

Step 2: Identify your "solid wastes"

What is a solid waste?

- Anything (solid, liquid, or gas) that has been discarded
  - Abandoned (disposed, burned, accumulated, or stored)
  - Recycled (recovered, regenerated, etc.)
  - Inherently waste-like
- Is not excluded by §261.4(a)

Waste Determinations

Burned (Furnace, Energy Recovery, etc.)

Accumulated or Stored

Recycled

Generated

- Out of Process
- Unusable/Off-Spec

Accumulated and Stored

Recycled

- Regenerated into usable product

TABLE 1

	Use constituting disposal (§261.2(c)(1))	Energy recovery/fuel (§261.2(c)(2))	Reclamation (§261.2(c)(3)), except as provided in §§261.4(a)(17), 261.4(a)(23), 261.4(a)(24) or 261.4(a)(27)	Speculative accumulation (§261.2(c)(4))
	1	2	3	4
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in 40 CFR Part 261.31 or 261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
By-products (listed in 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
Commercial chemical products listed in 40 CFR 261.33	(*)	(*)	-	-
Scrap metal that is not excluded under 40 CFR 261.4(a)(13)	(*)	(*)	(*)	(*)

NOTE: The terms "spent materials," "sludges," "by-products," and "scrap metal" and "processed scrap metal" are defined in §261.1.

RCRA Regulated Recycled Materials

Waste Materials

- Spent Material
- Sludge
- By-Products
- Commercial Chemical Products
- Scrap Metal

Processes

- Use Constituting Disposal
- Energy Recovery/Fuel
- Reclamation
- Speculative Accumulation

TABLE 1

	Use constituting disposal (§261.2(c)(1))	Energy recovery/fuel (§261.2(c)(2))	Reclamation (§261.2(c)(3)), except as provided in §§261.4(a)(17), 261.4(a)(23), 261.4(a)(24) or 261.4(a)(27)	Speculative accumulation (§261.2(c)(4))
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NOTE: The terms "spent materials," "sludges," "by-products," and "scrap metal" and "processed scrap metal" are defined in §261.1.

RCRA Regulated Recycled Materials

How to use:

- **Find the intersection for the waste and the process**
- **Asterisk – May be a solid waste**
- **Dash – May be excluded from the definition of a solid waste**

TABLE 1

	Use constituting disposal (§261.2(c)(1))	Energy recovery/fuel (§261.2(c)(2))	Reclamation (§261.2(c)(3)), except as provided in §§261.4(a)(17), 261.4(a)(23), 261.4(a)(24) or 261.4(a)(27)	Speculative accumulation (§261.2(c)(4))
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Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
By-products (listed in 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
Commercial chemical products listed in 40 CFR 261.33	(*)	(*)	-	-
Scrap metal that is not excluded under 40 CFR 261.4(a)(13)	(*)	(*)	(*)	(*)

NOTE: The terms "spent materials," "sludges," "by-products," and "scrap metal" and "processed scrap metal" are defined in §261.1.

Inherently Waste-Like

What About These?

Other Examples

- Floor Sweepings
- Sandblast Media
- PPE/Uniforms/Aprons/Rags
- Paint filters
- Masking Media (e.g., tape and paper)

Waste Determinations

Step 3: Exemptions

§261.4(a) – Solid Waste

§261.4(b) – Hazardous Waste

- Industrial Wastewater (Clean Water Act)
- Agricultural Wastes
- Excluded Scrap Metal (process, unprocessed home, and unprocessed prompt) being recycled
- Mining overburden when returned to the mine site
- Household Hazardous Waste

Waste Determinations

Step 4: Is it hazardous?

A solid waste which, if not excluded by §261.4(b), meets the definition of:

Characteristic Waste (D-List)

Listed Waste (F, K, P, U-Lists)

Refer to 40 CFR §261 Subpart B

Waste Determinations

Listed Wastes

- Spent Wastes
  - F-Listed (non specific sources)
  - K-Listed (specific sources)
- Unused Commercial Chemical Products
  - P-Listed (acutely hazardous, sole active ingredient)
  - U-Listed (sole active ingredient)

Characteristic Waste

Wastes that are hazardous because they exhibit a hazardous characteristic.

D001

D002

D003

D004-D043

Characteristic Waste

D001 – Ignitibility

- Flashpoint < 140˚ F (60˚ C)
- §261.21

D002 – Corrosivity

- pH ≤ 2 or ≥ 12.5
- §261.22

Characteristic Waste

D003 – Reactivity

- Unstable
- Reacts violently with water or other external substances
- Explosive
- §261.23

Characteristic Waste

D004-D043 – Toxicity

- §261.24

Table 1 - §261.24

EPA HW No.	Contaminant	CAS No.	Regulatory Level (mg/L)
D018	Benzene	71-43-2	0.5
D008	Lead	7439-92-1	5.0

Characteristic Waste

Toxicity Characteristic Leaching Procedure (TCLP)

- Soil sample extraction method for chemical analysis employed as an analytical method to simulate leaching through a landfill .
  - Volatile Compounds
  - Heavy Metals
  - Pesticides/Herbicides
  - Base Neutral Acids

How Do You Make This Determination?

Process Knowledge

- **SDS – Flashpoint, pH, Reactivity, Ingredients**
- **What chemicals are involved?**
- **What is the process/chemical interaction?**
- **EPA clarified what constitutes process knowledge in the 2017 CFRs.**

Laboratory Analysis from a KDHE-Certified Laboratory

- **TCLP analysis by Method 1311 (SW-846)**
- **http://www.kdheks.gov/envlab/disclaimer.html**

Document the Determination

- Document how each waste determination was made.
- Include copies of all supporting documentation (analytical reports, design plans, SDSs, etc.)
- Waste profiles by themselves are not generally sufficient determinations or documentation.
- Do not rely on your contractor/waste disposal company.
- Retain all documentation until three years after waste was last shipped off site.

Waste Determination

"Kansas Waste Determination" App

Developed through a partnership between KDHE-BWM and SBEAP

Available on both Android and Apple app stores. Coming soon to Microsoft Store.

Will generate a sufficient waste determination document; however,

- Only as accurate as the information you provide.
- Will need to attach all supporting documentation.

Things That Are Not Hazardous Wastes

Used Oil – Used oil that is recycled for energy or material recovery is not subject to the hazardous waste regulations.

Medical Waste – waste generated in connection with human or animal care, which is potentially capable of causing disease or injury. Not necessarily a hazardous waste, but probably a "special waste."

"**Special Waste**" – any solid waste that, because of physical, chemical, or biological characteristics, requires special management standards due to concerns for safety regarding handling, management, or disposal.

Waste Determination

Step 5: What is your monthly generation?

Each calendar month:

- Calculate how many pounds of EACH hazardous waste you generate
- Cannot average over time
- Add up all weights for your monthly TOTAL

The total tells you which class you fall into.

Waste Determination

Example:

Paint Booth

15 pounds waste paint (D007)

10 pounds spent solvent (D001/D007/F003)

Maintenance

40 pounds solvent-contaminated wipes (F002)

150 pounds spent blast media (D007)

215 pounds of waste generated this month.

Waste Determination

If your monthly generation rate varies routinely, you must use the highest value.

In addition, some waste streams may only be generated every other month or only a couple times per year. Don't forget to count these!

Generator Classifications

Permit exempt classification system based on your monthly generation rate.

Designed to account for the amount of waste generated and apply appropriate regulatory standards to protect human health and the environment.

Most classes are permit exempt as long as regulations are followed.

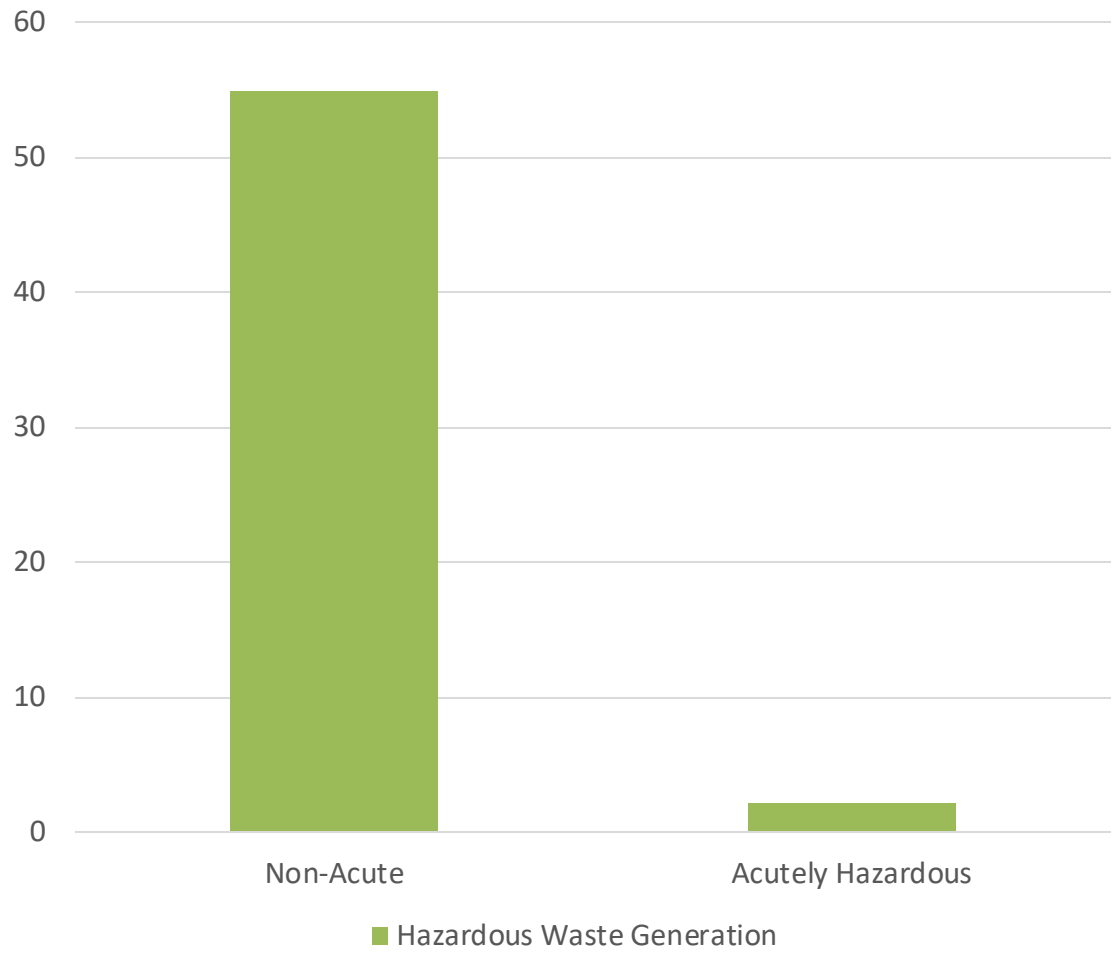
Federal	Kansas
Large Quantity Generator	Large Quantity Generator
Small Quantity Generator	Small Quantity Generator
Very Small Quantity Generator (Formerly Conditionally Exempt Small Quantity Generator)	Kansas Small Quantity Generator
	Conditionally Exempt Small Quantity Generator

Conditionally Exempt Small Quantity Generator

<u>Hazardous Waste Monthly Generation:</u>

Non-Acute Hazardous Wastes:
- Less than 55 pounds

Acutely Hazardous:
- Less than 2.2 pounds of P-Listed Hazardous Waste and F-Listed Dioxins:
  - F020
  - F021
  - F022
  - F023
  - F026
  - F027
- 220 pounds of spill cleanup residues and debris



55 Pounds of Water

This is only an approximation based on water weight.

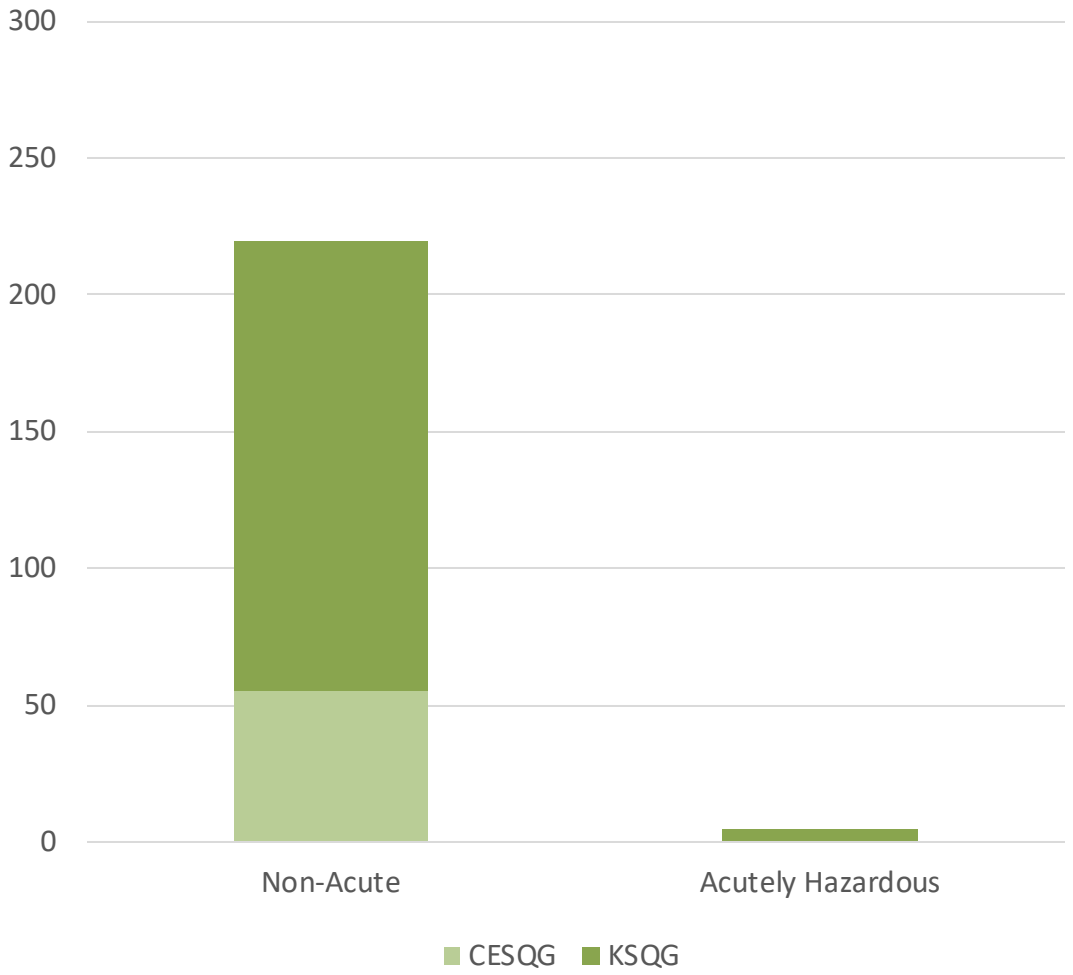
Your weights/volumes will vary!

Kansas Small Quantity Generator

<u>Hazardous Waste Monthly Generation:</u>

Non-Acute Hazardous Wastes:
- 55 pounds or more
- Less than 220 pounds

Acutely Hazardous:
- Less than 2.2 pounds of P-Listed Hazardous Waste and F-Listed Dioxins:
  - F020
  - F021
  - F022
  - F023
  - F026
  - F027
- 220 pounds of spill cleanup residues and debris



220 Pounds of Water

This is only an approximation based on water weight.

Your weights/volumes will vary!

Small Quantity Generator

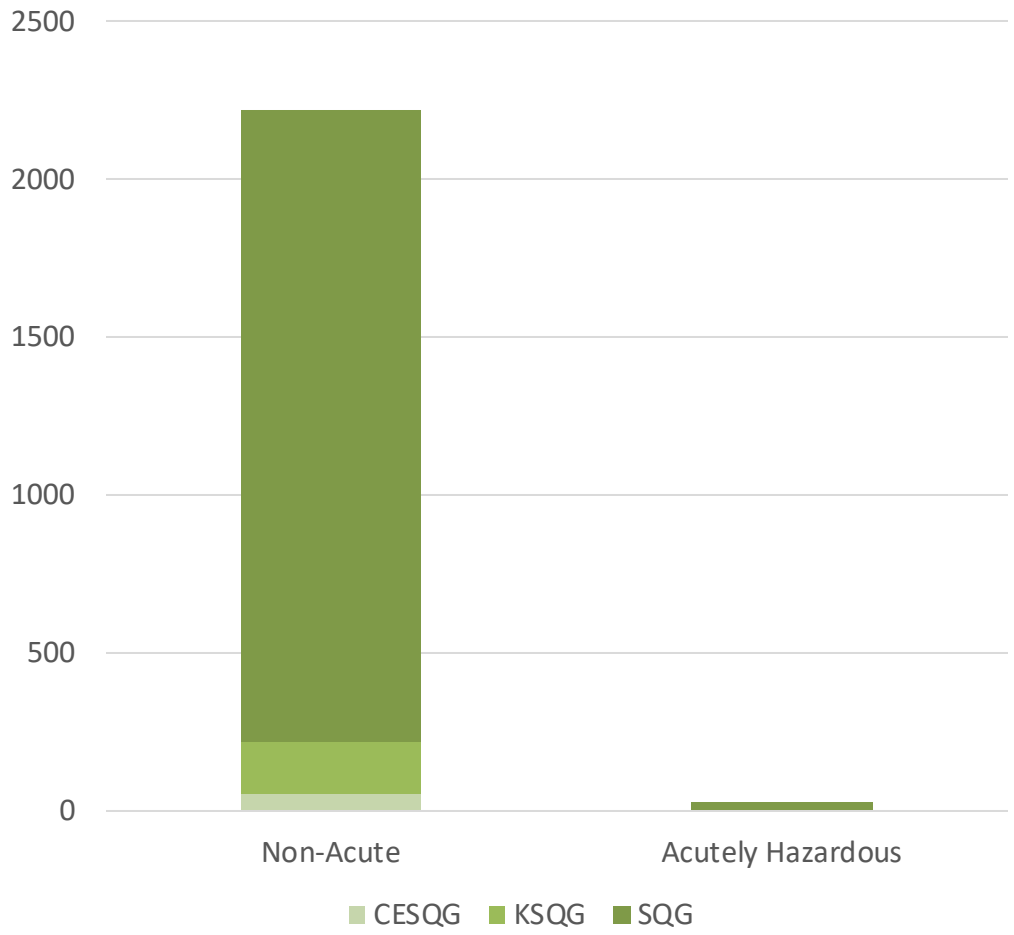
<u>Hazardous Waste Monthly Generation:</u>

Non-Acute Hazardous Wastes:

- 220 pounds or more
- Less than 2,200 pounds

Acutely Hazardous:

- Less than 2.2 pounds of P-Listed Hazardous Waste and F-Listed Dioxins:
  - F020
  - F021
  - F022
  - F023
  - F026
  - F027
- 220 pounds of spill cleanup residues and debris



Large Quantity Generator

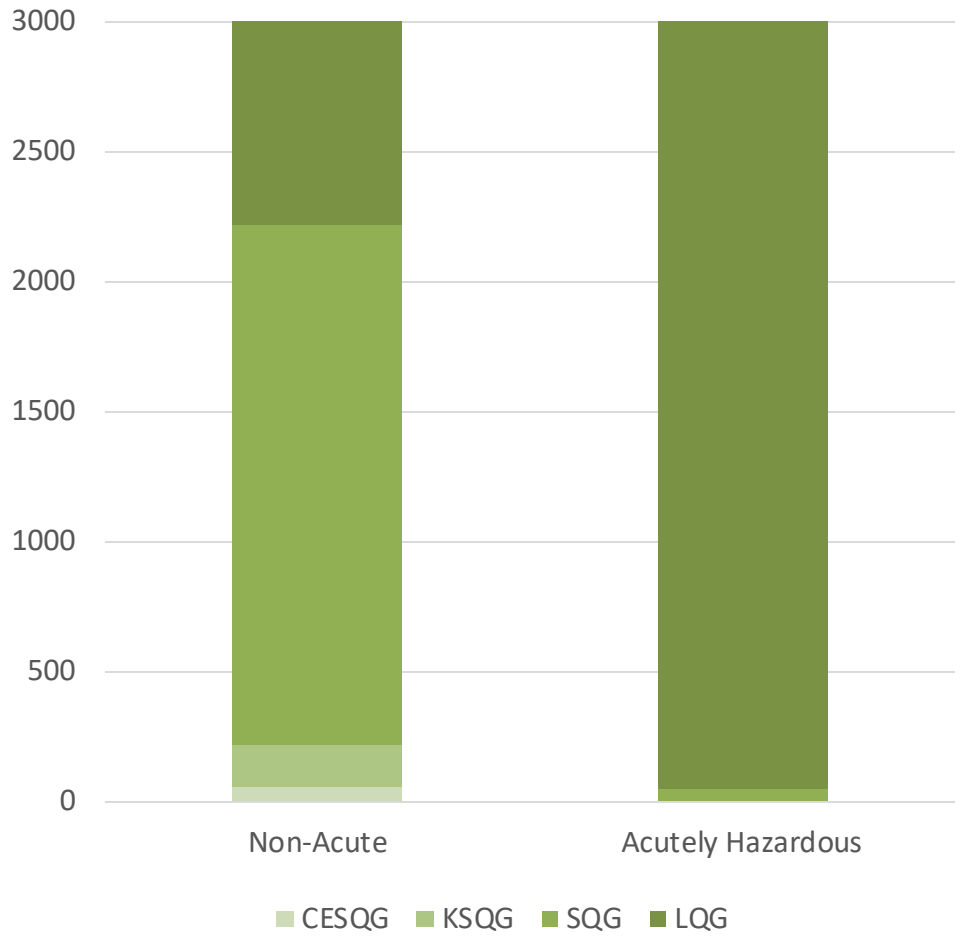
Hazardous Waste Monthly Generation:

Non-Acute Hazardous Wastes:

- 2,200 pounds or more

Acutely Hazardous:

- 2.2 pounds or more of P-Listed Hazardous Waste and F-Listed Dioxins:
  - F020
  - F021
  - F022
  - F023
  - F026
  - F027
- More than 220 pounds of spill cleanup residues and debris



On-Site Management

General Requirements

KSQGs, SQGs, and LQGs are required to:

- **Notify KDHE of generator activity and obtain an EPA ID number (Form 8700-12)**
- **Update the notification within 60 days of any change in information**
- **Pay an annual monitoring fee to KDHE**

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A to Z Topic Listing

- Waste Home
- Compliance, Assistance, & Enforcement
- Composting
- Hazardous Waste Generator Program
- Hazardous Waste Permitting
- Household Hazardous Waste
- Regulations, Policies, & Technical Guidance
- Reports, Publications, & Newsletters
- Solid Waste Permitting
- Waste Reduction, Public Education, & Grants
- Waste Tire Program

Bureau of Waste Management Forms

Solid Waste Forms

- Solid Waste Landfill
- Solid Waste Processing & Planning
- Solid Waste Closure/Post-Closure Cost Estimating Worksheets
- Solid Waste Activities not Requiring a Permit
- Disaster Response Forms and Information
- Solid Waste Restrictive Covenants & Disclosures
- Solid Waste Financial Assurance & Corrective Action Forms
- Household Hazardous Waste
- Grant Forms and Recipient Listings
- Waste Tires Permitting
- Orphaned Waste Tire Program

Hazardous Waste Forms

- Hazardous Waste Permits
- Hazardous Waste Generator Forms

The forms listed below are available on the Hazardous Waste Forms Page

Day Accumulation Container Notification Form
Hazardous Waste Generator Book
Hazardous Waste Generator Fees
Hazardous Waste Manifest Form
Hazardous Waste Report Forms (Site Identification; Off-Site Identificatio; Waste Generation and Management; Waste Received from Off-Site; Monitoring Fees)
Hazardous Waste Variance Request
Kansas Generator Emergency Response Form
Kansas Hazardous Waste Transporter Registration
Kansas Used Oil Transporter Registration
Notification of Regulated (HW) Activity
Off-Site Hazardous Waste Treatment Fees Reporting Form

- Orphan Hazardous Waste Disposal

Preparedness and Prevention KSQGs and SQGs

Emergency Coordinator

- Available 24/7
- Able to reach facility within a short period of time
- Familiar with emergency procedures and locations of waste

Post the following information next to a telephone

- Name and telephone number of emergency coordinator;
- Location of fire extinguishers, spill control material and fire alarm (if present);
- Telephone number of the fire department, unless direct alarm is available

2018 Hazardous Waste Generator Workshop

ATTACHMENT C

HAZARDOUS WASTE EMERGENCY RESPONSE

EMERGENCY COORDINATOR: _____

HOME PHONE NUMBER: _____

CELL PHONE NUMBER (Optional): _____

ALTERNATE EMERGENCY COORDINATOR: _____

HOME PHONE NUMBER: _____

CELL PHONE NUMBER (Optional): _____

FIRE DEPARTMENT PHONE NUMBER: _____
(unless there is a direct alarm)

EQUIPMENT LOCATION
(A map showing the locations is sufficient)

FIRE EXTINGUISHERS: _____

SPILL CONTROL: _____

FIRE ALARMS (if present): _____

RESPONSE ACTION

FIRE: Call the Fire Department or extinguish the fire using an appropriate fire extinguisher.

SPILL: Contain the flow of hazardous waste. Clean up the hazardous waste and any contaminated materials or soil as soon as possible.

FIRE, EXPLOSION, OR RELEASE, WHICH THREATENS HUMAN HEALTH OR SURFACE WATER:
Notify the National Response Center with the following information:

- Name, address, and U.S. EPA ID Number of generator
- Date, time, and type of incident
- Quantity and type of hazardous waste involved
- Extent of any injuries
- Estimated quantity and disposition of recovered materials

NATIONAL RESPONSE CENTER 1-800-424-8802

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT (785) 296-1679

Preparedness and Prevention KSQGs and SQGs

Training

- Must provide within 6 months of hire or transfer to new position
- Must provide annual training
- Document the training (who, what, when) and maintain for 3 years.

Please Note:

- Training must be sufficient to ensure all personnel are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

Preparedness and Prevention KSQGs and SQGs

Must be equipped with:

- Internal communications or alarm system
- A device capable of summoning emergency assistance from local emergency responders
- Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment
- Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems

Preparedness and Prevention KSQGs and SQGs

Must attempt arrangements with local emergency organizations, including:

- Familiarize police, fire departments, and hospitals with the facility, hazardous waste handled, etc.
- Designate one department as the primary emergency authority where more than one might respond.
- Maintain agreements with state emergency response teams, emergency response contractors, and equipment suppliers as necessary.

Preparedness and Prevention KSQGs and SQGs

Maintain and operate facility to minimize the possibility of:

Fire

Explosion

Unplanned Sudden Release

Unplanned Non-Sudden Release

Preparedness and Prevention KSQGs and SQGs

Test and maintain all emergency and communications equipment to assure proper operation in an emergency.

Ensure personnel have immediate access to an internal alarm or emergency communication device when handling hazardous waste.

Preparedness and Prevention LQGs Only

Prepare and maintain (update) a contingency plan that meets all of the requirements of 40 CFR §265 Subpart D, including:

- Name, address, and contact information for the Emergency Coordinator
- Arrangements with all emergency services
- List and location of all emergency equipment at the facility, their description, and their capabilities
- Emergency procedures
- Evacuation plan

Preparedness and Prevention LQGs Only

- Must ensure the contingency plan is available in case of an emergency.
- Must train employees and maintain required training records.

Management of Waste

Accumulation of waste can occur in:

- Satellite Accumulation Containers
- Storage Containers
- Tanks

Management of Waste

Labeled with the words "Hazardous Waste"

- **In good condition and compatible with the contents**
- **Kept closed unless actively adding or removing waste**

Management of Waste

Good Container:

Preprinted labels are great for legibility and will meet the requirement, but...

Management of Waste

Good Container:

Labels can be handwritten on an adhesive applied to the container...

Management of Waste

Good Container:

Or written directly on the container.

Management of Waste

Open Container:

Although some processes require a direct discharge into the waste container, the tubes do not create a complete seal by themselves.

Management of Waste

Closed Container:

A cap or bung which allows a tube connection can provide the seal required to be considered closed.

Management of Waste

Poor Condition:

Containers are dented, preventing them from closing properly.

Management of Waste

Not Compatible with Container:

Corrosive wastes should not be placed in metal containers.

Management of Waste

Satellite Accumulation Containers

- **At or near the point of generation**
- **Under the control of the operator**
- **Only one container for each waste stream at each point of generation**
- **55 gallons or less**
- **Must be managed as a storage container within three days of no longer meeting the definition of a satellite.**

Management of Waste

Day Accumulation Containers

- **At or near the point of generation**
- **Under the control of the operator**
- **Only one container for each waste stream at each point of generation**
- **6 gallons or less**
- **Must be emptied into a container at the end of each day, or each shift if operating 24-hours.**

Management of Waste

Good Container:

- At or near the point of generation
- Under the control of the operator
- Marked “Hazardous Waste”
- Closed
- In good condition
- 55 gallons or less

Management of Waste

Container Issues:

- **Not marked "Hazardous Waste"**
- **Open**
- **More than one container of the same waste at the same point of generation.**

Management of Waste

More Than One Container:

Not compliant unless each container holds a separate waste stream.

Management of Waste

Storage Containers

- **Marked with the accumulation start date**
  - **Date hazardous waste is first added, or date the satellite container became a storage container.**
- **Separate incompatibles**
  - **Dike, Berm, etc.**
- **Adequate aisle space to allow unobstructed movement in case of emergency.**
- **LQGs must store D001 and D003 waste at least 50 feet from property line.**

Management of Waste

Storage Areas

- **Can be located indoors or outdoors**
  - **Recommend they be covered and/or on pallets**
  - **Recommend secondary containment**
- **No state or federal limit on number of storage areas**

Management of Waste

Good Storage:

- Adequate aisle space
- Easily assess labeling and condition of containers
- Recommend stacking no more than two high

Management of Waste

Poor Aisle Space:

Boxes blocking the aisle and hindering access to containers

Management of Waste

Poor Aisle Space:

Access to any containers behind the outer row is not possible.

Management of Waste

Inspections

- **CESQGs and KSQGs – Monthly**
- **SQGs and LQGs – Weekly**

What to look for

- **Deterioration and Leaks**
- **Container Requirements (closed, labeled, dated)**

Management of Waste

Document

- **Date and Time of Inspection**
- **Name of Inspector (Not Initials)**
- **Observations Made**
- **Date and Nature of Remedial Actions Taken**

Management of Waste

Time on site:

- LQGs – 90 days or less
- SQGs – 180 days or less
  - May have up to 270 days if the waste is transported more than 200 miles
- CESQGs and KSQGs – No limit*

Weight restrictions

- SQGs – 13,200 lb (6,000 kg)
  - Subject to TSDF permitting requirements
- CESQGs and KSQGs – 2,200 lb
  - Subject to SQG requirements

* See CESQG and KSQG weight restrictions.

Management of Waste

Universal Waste

- **Universal waste (UW) is a subset of hazardous waste.**
- **Kansas follows EPA rules for UW.**

UW in Kansas includes:

- **Batteries**
- **Certain pesticides**
- **Mercury-containing equipment**
- **Lamps (including fluorescent bulbs)**

Management of Waste

UW batteries, mercury-containing equipment, and lamps, must be labeled (on container or each individual item):

- **"Universal Waste - _____"; or**
- **"Waste _____"; or**
- **"Used _____".**
- **Fill in the blank with: Batteries, mercury-containing equipment (or mercury thermostats), or lamps.**

UW pesticides must be labeled either:

- **"Universal Waste – Pesticides"; or**
- **"Waste Pesticides".**

Management of Waste

Containers must be:

- **Closed except when adding or removing waste.**
- **In good condition.**

UW may be accumulated on site for up to one year. Must be able to demonstrate this by:

- **Dating each container or the group of containers (such as on a pallet); or**
- **Date the accumulation area; or**
- **Maintain a written inventory or log**

Management of Waste

UW can be shipped under a bill of lading or other shipping papers. A Uniform Hazardous Waste Manifest is not required.

Employees who handle or have responsibility for managing UW must be given information describing the proper handling and emergency procedures appropriate to the type(s) of UW handled (Training).

Management of Waste

Inspections are unannounced

- **Routine inspections are chosen months in advance, based on the following:**
  - **Generator classification**
  - **Amount of time since last inspection**
  - **Industry sector priorities established by EPA or KDHE Enforcement**

Complaints can result in a full RCRA inspection

Compliance Assistance Visits (CAV) are available

Compliance Evaluation Inspections

Intro and review → **Walk-through** → **Records review** → **Exit briefing**

Compliance Evaluation Inspections

Questions the inspector will ask about your waste streams:

- How much of each waste stream is generated in a month?
- How is each managed/contained/stored?
- How is each disposed?
- Is it hazardous waste?
- How did you determine whether or not it is hazardous?
- What documentation do you have for your determination?

Inspection Checklists

A Waste Compliance Inspection Report:

- Basic information about the facility
- Name and Address
- Participants
- Number of Employees
- Site Contact
- Any Recent Changes
- Other Pertinent Information Not Mentioned Elsewhere

Inspection Checklists

Hazardous Waste Generator Requirements:

- Waste Stream Table
- General Requirements
- Universal Waste
- Generator Requirements
- Container Management
- Reporting and Recordkeeping
- Prepare and Train – KSQGs and SQGs
- Personnel Training for LQGs
- Manifest Requirements
- LDR Requirements
- Prepare and Prevent Requirements
- Contingency Plan for LQGs

Common Violations

Waste Determinations

- **Ensure you evaluate all waste streams, including any new, changing, or one-time wastes.**
- **Ensure you maintain documentation for your determinations in an easy to find location.**

Common Violations

Container Management

- **Pay attention during your inspections.**
- **Time off does not mean inspections do not need to be conducted. The waste is still there.**
- **Ensure employees understand container requirements.**

Common Violations

Preparedness and Prevention

- **Ensure you have your emergency information posted, preferably in a common area such as the plant floor.**
- **Ensure any updates to the facility contingency plan is addressed in a timely manner. If the emergency contact leaves, try to make the update in the contingency plan part of the transition process.**

Common Violations

Training

- **Maintain your documentation. This is your proof the training was conducted.**
- **Ensure all employees who handle hazardous waste containers receive the training.**

Additional Resources

•KDHE wants to help all generators achieve compliance. Please call us with any questions at 785-296-1600.
•Small Business Environmental Assistance Program (SBEAP) operated by the Pollution Prevention Institute (PPI) at KSU 1-800-578-8898 (free anonymous assistance).

Available Resources

- Website: http://www.kdheks.gov/waste
- Hazardous Waste Generator Handbook
  - Compliance/Training Manual
- Inspector Checklists
- Technical Guidance Documents and Policies

2018 Hazardous Waste Generator Workshop

Waste Determination

"Kansas Waste Determination" App

Developed through a partnership between KDHE-BWM and SBEAP

Available on both Android and Apple app stores. Coming soon to Microsoft Store.

Will generate a sufficient waste determination document; however,

- Only as accurate as the information you provide.
- Will need to attach all supporting documentation.

Contact Information

- BWM web site:
http://www.kdheks.gov/waste
- Ken Powell
785-296-1121
ken.powell@ks.gov
- Brian Burbeck
785-296-1613
brian.burbeck@ks.gov

Thank you/Questions

Our Mission: To protect and improve the health and environment of all Kansans.